

August 7, 2001

Jackie Blasdel  
Blasdel Enterprises, Inc.  
495 West McKee Street  
Greensburg, Indiana 47240

Re: Registered Operation Status,  
**031-14454-00013**

Dear Ms. Blasdel:

The registration renewal application from Blasdel Enterprises, Inc., received on May 25, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following metal fabrication and surface coating source, located at 495 West McKee Street, Greensburg, Indiana, is classified as registered:

- (a) Two (2) hand spray booths, known as Booth A and Booth B, installed prior to 1992 and installed 1992, respectively, exhausted to Stack A and Stack B respectively, each equipped with dry filters for particulate overspray control and one (1) enclosed powder coating booth, known as Booth C, installed in 1992, capacity: 1,542 metal units per year, total for the three booths.
- (b) One (1) buffing wheel, known as Buffing Wheel, equipped with a filter for particulate matter control, installed prior to 1992, exhausted to Stack D, capacity: 88 metal units per year.

The following conditions shall be applicable:

- 1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- 2. Any change or modification which may increase the potential to emit a combination of HAPs, VOC, PM or PM<sub>10</sub> to twenty five (25) tons per year or a single HAP to ten (10) tons per year from this source shall require approval from IDEM, OAQ prior to making the change.
- 3. (a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the Buffing Wheel shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The filter shall be in operation at all times the Buffing Wheel is in operation, in order to comply with this limit.

- (b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Booths A, B and C shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour.}$$

The dry filters shall be in operation at all times Booths A, B and C are in operation, in order to comply with this limit.

4. (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the Booths A, B and C shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

2-5.5. This is a renewal registration issued to this source. The source may operate according to 326 IAC

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Branch  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

PMC/MES

cc: File - Decatur County  
Decatur County Health Department  
Air Compliance - Warren Greiling  
Permit Tracking - Janet Mobley  
Air Programs Section - Michele Boner

<b>Registration Annual Notification</b>
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This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

<b>Company Name:</b>	<b>Blasdel Enterprises, Inc.</b>
<b>Address:</b>	<b>495 West McKee Street</b>
<b>City:</b>	<b>Greensburg, Indiana 47240</b>
<b>Authorized individual:</b>	<b>Jackie Blasdel</b>
<b>Phone #:</b>	<b>812-663-3213</b>
<b>Registration #:</b>	<b>R 031-14454-00013</b>

I hereby certify that Blasdel Enterprises, Inc. is still in operation and is in compliance with the requirements of Registration **031-14454-00013**.

<b>Name (typed): Jackie Blasdel</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Registration**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Blasdel Enterprises, Inc.</b>
<b>Source Location:</b>	<b>495 West McKee Street, Greensburg, Indiana 47240</b>
<b>County:</b>	<b>495 West McKee Street, Greensburg, Indiana 47240</b>
<b>SIC Code:</b>	<b>3567</b>
<b>Operation Permit No.:</b>	<b>R 031-14454-00013</b>
<b>Permit Reviewer:</b>	<b>Paula M. Cognitore</b>

The Office of Air Quality (OAQ) has reviewed an application from Blasdel Enterprises, Inc. relating to the construction and operation of a metal fabrication and surface coating source.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Two (2) hand spray booths, known as Booth A and Booth B, installed prior to 1992 and installed 1992, respectively, exhausted to Stack A and Stack B respectively, each equipped with dry filters for particulate overspray control and one (1) enclosed powder coating booth, known as Booth C, installed in 1992, capacity: 1,542 metal units per year, total for the three booths.
- (b) One (1) buffing wheel, known as Buffing Wheel, equipped with a filter for particulate matter control, installed prior to 1992, exhausted to Stack D, capacity: 88 metal units per year.

Note: Booth A and the Buffing Wheel do not have prior approvals because they were classified as exempt.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **New Emission Units and Pollution Control Equipment**

There are no new facilities/units requiring approval during this review.

#### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 031-2643, issued on October 19, 1992; and
- (b) AA 031-04848-00013, issued on October 17, 1995.

All conditions from previous approvals were incorporated into this permit.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
A	Spray Booth A	11.6	43.3	10,000	70
B	Spray Booth B	12.0	33.9	8,000	70
D	Buffing Wheel	15.0	10.0	3,000	70

### Enforcement Issue

- (a) IDEM is aware that the source did not submit their renewal application by December 26, 2000. An application for the purposes of this review was received on May 25, 2001.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the 326 IAC 2-5.5-4(a)(3) permit rules.

### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 25, 2001.

### Emission Calculations

See pages 1 through 2 of 2 of Appendix A of this document for detailed emissions calculations.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	5.36
PM <sub>10</sub>	5.36
SO <sub>2</sub>	0.00
VOC	15.02
CO	0.00
NO <sub>x</sub>	0.00

HAPs	Potential To Emit (tons/year)
MEK	0.439
Xylene	1.11
TOTAL	1.55

The potential to emit (as defined in 326 IAC 2-5.1-2) of VOC, PM and PM<sub>10</sub> are less than twenty-five (25) tons per year and greater than five (5) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2.

### Actual Emissions

No previous emission data has been received from the source.

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Booths A-C	0.265	0.265	-	13.47	-	-	-
Buffing Wheel	0.046	0.046	-	-	-	-	-
Clean-up	-	-	-	1.55	-	-	1.55
Total Emissions	0.311	0.311	-	15.0	-	-	1.55

### County Attainment Status

The source is located in Decatur County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Decatur County has been designated as

attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.

- (b) Decatur County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR Part 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### **Part 70 Permit Determination**

#### **326 IAC 2-7 (Part 70 Permit Program)**

This existing source, including the emissions from this permit R 031-14454-00013, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in Decatur County and the potential to emit VOC, PM and PM<sub>10</sub> is less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

#### **326 IAC 5-1 (Opacity)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### **State Rule Applicability - Individual Facilities**

##### **326 IAC 6-3-2 (Process Operations)**

- (a) The particulate matter (PM) from the Buffing Wheel shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The filter shall be in operation at all times the Buffing Wheel is in operation, in order to comply with this limit.

- (b) The particulate matter (PM) from Booths A, B and C shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times Booths A, B and C are in operation, in order to comply with this limit.

##### **326 IAC 8-2-9 (Miscellaneous Metal Coating)**

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the Booths A, B and C shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

#### **Conclusion**

The operation of this metal fabrication and surface coating source shall be subject to the conditions of the attached proposed Registration 031-14454-00013.

Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations

Company Name: Blasdel Enterprises, Inc.  
Address City IN Zip: 495 West McKee Street. Greensburg, Indiana 47240  
Reg: 031-14454  
Plt ID: 031-00013  
Reviewer: Paula M. Cognitore  
Date: May 25, 2001

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Paint Booths A, B and C																
Baking Enamel	8.40	41.60%	0.0%	41.6%	0.0%	58.40%	5.00000	0.176	3.49	3.49	3.08	73.80	13.47	4.73	5.98	75%
Air Dry Enamel	8.40	41.60%	0.0%	41.6%	0.0%	58.40%	5.00000	0.176	3.49	3.49	3.08	73.80	13.47	4.73	5.98	75%
Water Reducible Enamel	9.00	38.80%	0.0%	38.8%	0.0%	61.20%	5.00000	0.176	3.49	3.49	3.07	73.75	13.46	5.31	5.71	75%
											3.08	73.80	13.47	5.31		
Clean-up	Gal of Mat. (gal/yr)	lb/VOC per gal/coating														
MEK	131.40	6.68											0.439			
Xylene	306.60	7.25											1.111			
State Potential Emissions	Add worst case coating to all solvents								PM	Control Efficiency	95.00%					
										Uncontrolled		3.08	73.80	15.02	5.31	
										Controlled					0.265	

Paint Booth C is a manual powder booth that is totally enclosed

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations**  
**Particulate**  
**From Buffing Operations**

Page 2 of 2 TSD App A

**Company Name:** Blasdel Enterprises, Inc.  
**Address City IN Zip:** 495 West McKee Street. Greensburg, Indiana 47240  
**Reg:** 031-14454  
**Plt ID:** 031-00013  
**Reviewer:** Paula M. Cognitore  
**Date:** May 25, 2001

Equipment	Actual Collected (2000 hours) (lb/yr)	Control Efficiency	Before Control (2000 hours) (lb/yr)	Before Control (8760 hours) (lb/yr)	Before Control (8760 hours) (tons/yr)
Buffing Wheel	20	95.00%	21.05	92.2	0.046

**Methodology**

Actual before controls (lb/year) = Actual Collected (2000 hours) (lb/yr) / control efficiency

Potential before controls (lb/year) = Actual before controls (2000 hours) \* (8760hours/2000hours)

Potential before controls (tons/yr) = Potential before controls (8760 hours) / 2000 pounds